

pGOV4: 3,092bp

Description:

pGOV4 is a selection vector that confers ampicillin or kanamycin resistance to prokaryotes. pGOV4 vector is prepared for rapid, bi-directional cloning of synthetic genes and PCR-amplified DNA. The vector is devoid of most common restriction sites and lacks a promoter around the cloning site.

Location of Features:

Ampicillin resistance (β -lactamase) gene	(416-1273)
Kanamycin resistance gene	(1422-223 5)
pUC origin or Replication	(2296-2969)
Clone Site:	(203)

Propagation in E.coli:

Suitable host strains DH5 α , HB101, and other general purpose strains.

Selectable marker: plasmid confers resistance to ampicillin (100 μ g/ml)

Resistance to kanamycin (50 μ g/ml)

E.coli replication origin: pUC

Copy Number: ~500-1,000

> pGOV4

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gcgcccacaaacgcgaacccgcctctccccgcgcgttgccgattcattaatgcagctggcagcagagtttc
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pGOV4 Restriction Sites:

Site:	Sequence	Positions:
AatI	agg cct	none
AatII	gacgt c	none
Acc16I	tgc gca	981
AccII	cg cg	30, 238, 258, 282, 313, 645, 1138, 1461, 1511, 1856, 2343, 2924
AccIII	t ccgga	none
AclI	aa cgtt	602, 975
AcvI	cac gtg	none
AfaI	gt ac	723, 1689
AfeI	agc gct	203
Af lII	c ttaag	none
AgeI	a ccggt	none
AhlI	a ctagt	none
Alw44I	g tgcac	532, 2653
AluI	ag ct	55, 119, 851, 914, 1014, 2410, 2667, 2713, 2803, 3029
Aor51HI	agc gct	203
ApaI	gggcc c	none
ApaLI	g tgcac	532, 2653
AscI	gg cgccg	none
AseI	at taat	47, 106, 1029, 2053, 2242
Asp718I	g gtacc	none
AsuII	tt cgaa	none
AvaI	c ycgrg	1726
AviII	tgc gca	981
AvrII	c ctagg	none
BalI	tgg cca	none
BamHI	g gatcc	none
BanIII	at cgat	1545

BbeI	ggcgc c	none
BbrPI	cac gtg	none
BbuI	gcatg c	none
BcuI	a ctagt	none
BclI	t gatca	none
BfaI	c tag	1011, 1346, 1454, 2474
BfrI	c ttaag	none
BfrBI	atg cat	1702, 1968
BglII	a gatct	none
BlnI	c ctagg	none
BseCI	at cgat	1545
BsePI	g cgcgc	none
BseX3I	c ggccg	none
BshTI	a ccggt	none
Bsp1407I	t gtaca	none
Bsp19I	c catgg	none
BspDI	at cgat	1545
BspEI	t ccgga	none
BsrGI	t gtaca	none
BssHII	g cgcgc	none
BstUI	cg cg	30, 238, 258, 282, 313, 645, 1138, 1461, 1511, 1856, 2343, 2924
ClaI	at cgat	1545
DraI	ttt aaa	626, 1318, 1337
EagI	c ggccg	none
EcoRI	g aatTC	none
EcoRV	gat atc	none
EgeI	ggc gcc	none
FseI	ggccgg cc	none
FspI	tgc gca	981
HaeIII	gg cc	38, 190, 813, 1080, 1160, 1458, 1941, 2493, 2927, 2945, 2956
HincII	gty rac	none
HindIII	a agctt	none
HinfI	g antc	41, 1205, 1765, 1821, 1993, 2078, 2084, 2597, 2993, 3068
HpaI	gtt aac	none
HpaII	c cgg	159, 667, 909, 1019, 1086, 1120, 1727, 1809, 1990, 2399, 2589, 2615, 2762
KasI	g gcgcc	none
KpnI	ggtac c	none
MboI	gatc	521, 557, 574, 832, 878, 896, 1237, 1342, 1354, 1721, 1851, 2103, 2307, 2315, 2326, 2401
MfeI	c aattg	none
MluI	a cgcgt	none
MscI	tgg cca	none

MseI	t taa	47, 106, 262, 625, 990, 1029, 1264, 1317, 1331, 1336, 1465, 1844, 2053, 2242, 2263
MspI	c cgg	159, 667, 909, 1019, 1086, 1120, 1727, 1809, 1990, 2399, 2589, 2615, 2762
NaeI	gcc ggc	none
NarI	gg cgcc	none
NcoI	c catgg	none
NdeI	ca tatg	none
NdeII	gatc	521, 557, 574, 832, 878, 896, 1237, 1342, 1354, 1721, 1851, 2103, 2307, 2315, 2326, 2401
NgoMIV	g ccggc	none
NheI	g ctagc	none
NotI	gc ggccgc	none
NruI	tcg cga	1511
NsiI	atgca t	1704, 1970
PacI	ttaat taa	none
PciI	a catgt	2967
PhoI	gg cc	38, 190, 813, 1080, 1160, 1458, 1941, 2493, 2927, 2945, 2956
PmeI	gttt aaac	none
PmlI	cac gtg	none
PsiI	tta taa	none
PstI	ctgca g	none
PvuI	cgat cg	835, 1854
PvuII	cag ctg	55
RsaI	gt ac	723, 1689
SacI	gagct c	none
SacII	ccgc gg	none
SalI	g tcgac	none
Sbf I	cctgca gg	none
ScaI	agt act	723
SfoI	ggc gcc	none
SmaI	ccc ggg	1728
SnaBI	tac gta	none
SpeI	a ctagt	none
SphI	gcatg c	none
SspI	aat att	399, 1779
SstI	gagct c	none
SstII	ccgc gg	none
StuI	agg cct	none
SwaI	attt aaat	none
TaqI	t cga	550, 1545, 1819, 2222, 2869
TliI	c tcgag	none
VspI	at taat	47, 106, 1029, 2053, 2242
XbaI	t ctaga	none
XhoI	c tcgag	none



XmaI

c | ccggg

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